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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/729,587	12/06/2003	Timothy M. Shively	P477	1576

7590 06/03/2005

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EXAMINER
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KRUER, KEVIN R

ART UNIT	PAPER NUMBER
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1773

DATE MAILED: 06/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/729,587

Applicant(s)

SHIVELY ET AL

Examiner

Kevin R Kruer

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 31 March 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. Claims 1-16 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Inanuma et al (US 4,978,181) in view of Levchik et al (US 6,569,928), Pengilly et al (US 4,185,046), and Mitsuishi et al (US 4,115,617).

Inanuma teaches a sunshade comprising a transparent substrate and first and second base layers provided on either surface of the substrate (abstract). Said first and second base layers may comprise PET (col 3, line 8, and col 3, line 37), and are herein relied upon to read on the claimed "two polymeric film layers." The second base layer may have a light reflecting layer provided on the inside surface (col 3, line 44) thereon which partly transmits visible light (abstract). Said light reflecting layer (herein relied upon to read on the claimed "metallized layer") comprises an aluminum layer and transmits 50% or less visible light (col 3, lines 41). Said teaching is herein understood to be sufficiently specific to anticipate the claimed light transmittance in claims 2 and 3. The light-reflecting layer is adhered to the surface of the transparent substrate with an adhesive (col 3, line 45). The second base layer may be provided with a protective layer (abstract) that is herein relied upon to read on the claimed scratch resistant coating of claim 10. The laminate may further comprise a UV reflecting layer, herein relied upon to read on the claimed UV absorbing material.

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Inanuma does not teach that the polyester layers should comprise a fire retardant. However, Levchik teaches that rescorcinol bis(diphenyl phosphate) may be added to polyester compositions in order to improve the fire retardency thereof (abstract). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to add rescorcinol bis(diphenyl phosphate) to the PET layers taught in Inanuma. The motivation for doing so would have been to improve the sunshade's fire retardance.

Inanuma also does not teach the claimed adhesive composition. However, Pengilly teaches a flame retardant adhesive to be utilized with polyethylene terephthalate films. The adhesive comprises a polyester adhesive and a flame retardant comprising a brominated based compound (col 1, lines 44-col 2, line 18). The fire retardant is included in amounts of 10-50wt% (col 2, lines 56+). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the adhesive taught in Pengilly as the adhesive of the laminate taught in Inanuma. The motivation for doing so would have been to improve the flame retardance of the laminate.

Inanuma also does not teach that the PET layers may comprise a UV absorber. However, Mitsuishi teaches PET has the defect that when it is exposed to sunlight for long periods of time, its mechanical properties are markedly deteriorated (col 1, lines 17+). In order to improve the weather resistance of the PET, it has been known to incorporate an ultraviolet absorber in the film. Thus, it would have been obvious to one

of ordinary skill in the art at the time the invention was made to incorporate an UV absorber into the PET layers taught in Inanuma in order to improve their weatherability.

The examiner takes the position that the claimed haze and light transmittance are inherent to the laminate taught in Inanuma because said laminate comprises the same layers comprising the same compositions as the claimed laminate.

3. Claims 17, 19, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Inanuma et al (US 4,978,181) in view of Levchik (US 6,569,928) and Pengilly et al (US 4,185,046), and Mitsubishi et al (US 4,115,617), as applied to claims 1-16 and 21 above, and further in view of Fuchs et al (US 5,740,649).

Inanuma in view of Pengilly, Mitsubishi, and Levchik is relied upon as above, but does not teach that the sunshade may be perforated. However, Fuchs teaches that it is known in the art to make a foil "sound permeable" by making a multiplicity of small holes/perforations therein (col 5, lines 18+). The perforations may be spaced 1.2mm from each other (col 7, line 47). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to put micro-perforations into the sunshade taught in Inanuma at a spacing of 1.2mm. The motivation for doing so would have been to make the sunshade sound absorbing.

4. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Inanuma et al (US 4,978,181) in view of Levchik et al (US 6,569,928), and Mitsubishi et al (US 4,115,617), and Pengilly et al (US 4,185,046), as applied to claims 1-16 and 21 above, and further in view of Jablonka et al (US 4,555,433).

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Inanuma in view of Pengilly and Levchik is relied upon as above, but does not teach that the sunshade should be formed with a plurality of adjacent cup shaped recesses arranged in the form of a grid. However, Jablonka teaches that forming a element with a plurality of adjacent cup shaped recesses arranged in the form of a grid makes said material sound deadening (abstract). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to form the sunshade taught in Inanuma with a plurality of adjacent cup shaped recesses arranged in the form of a grid. The motivation for doing so would have been to provide said sunshade with sound deadening properties.

### ***Response to Arguments***

Applicant's arguments filed March 31, 2005 have been fully considered but they are not persuasive.

Applicant argues that none of the cited prior art individually shows the combination of material and properties as are currently claimed. The examiner agrees but notes that the rejections never took the position that any single reference anticipated the claims.

Applicant further argues that there is no disclosure in Levchik that the (1) PET/adhesive composite is transparent, (2) the composite has low haze optical properties, (3) the adhesive may contain FR, or (4) the use of a UV absorber in specific layers. The examiner notes that Levchik is a secondary reference that is relied upon to modify the teachings of Inanuma. Levchik was never relied upon to teach the claimed composite, the claimed optical properties, the use of a FR in the adhesive, or the use of

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a UV absorber. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Applicant further argues that the presence of a FR in the PET film alone is not sufficient to provide a composite shade that meets the most stringent FR requirements. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., FR requirements) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

With regard to Pengilly, Applicant argues the composite is opaque due to the aluminum foil and the document is silent on the optical properties of the composite and the use of a UV absorber. Applicant's arguments are noted. However, Pengilly was never relied upon to teach a transparent substrate, the claimed optical properties or the use of a UV absorber. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Applicant further argues that Pengilly discusses the problems associated with the use of FR in an adhesive and states the adhesive can be somewhat hazy due to the presence of FR. The examiner agrees, but notes that Pengilly pre-selected the amount of FR added to the adhesive in order to control the haze of the adhesive. Thus, the examiner maintains the position that the laminate taught by the prior art taught inherently meets the claimed haze limitations.

With regard to Inanuma, Applicant argues there is no motivation to combine the teachings of Inanuma and Pengilly since any person reading Pengilly will realize there is a potential problem due to haze cause by FR in the adhesive. The examiner respectfully disagrees. As noted above, Pengilly pre-selected the amount of FR added to the adhesive in order to control the haze of the adhesive. Thus, the examiner maintains the position one of ordinary skill in the art would have been motivated to combine the teachings of Inanuma and Pengilly for the reasons noted in the rejection.

Applicant argues that even if Inanuma and Pengilly were combined as suggested by the examiner, the resulting laminate would not read on the claimed laminate because the composite would not have a polymeric film layer containing FR material as required in the present invention. The examiner agrees, but notes that Levchik was relied upon for such a teaching. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).



For the reasons noted above, the rejections are maintained.

***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin R Kruer whose telephone number is 571-272-1510. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carol Chaney can be reached on 571-272-1284. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read "Kevin R. Kruer". The signature is fluid and cursive, with the first name "Kevin" and last name "Kruer" clearly distinguishable.

Kevin R. Kruer  
Patent Examiner-Art Unit 1773